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Institutional Framework for Allocating and Managing Water Resources in California

In California, water use and supplies are controlled and managed under an intricate system of federal and State laws. Common law principles, constitutional provisions, State and federal statutes, court decisions, and contracts or agreements all govern how water is allocated, developed, or used. All of these components constitute the institutional framework for allocation and management of water resources in California.

This appendix presents an overview of California's institutional framework, highlighting some of the more recent changes. Summarized here are major constitutional requirements, statutes, court decisions, and agreements that form the groundwork for many water resource management and planning activities. Changes since the publication of Bulletin 160-93 are covered in the Chapter 2 text.

Allocation and Management of California's Water Supplies

The following subsections condense basic water rights laws and doctrines governing allocation and use of California's water supplies.

California Constitution Article X, Section 2

The keystone of California's water law and policy, Article X, Section 2 of the California Constitution, requires that all uses of the State's water be both reasonable and beneficial. It places a significant limitation on water rights by prohibiting the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water.

Riparian and Appropriative Rights

California operates under a dual system of water rights for surface water which recognizes both riparian rights and appropriative rights. Under the riparian doctrine, the owners of land have the right to divert, but not store, a portion of the natural flow of water flowing by their land for reasonable and beneficial use upon their land adjacent to the stream and within its watershed, subject to certain limitations. Generally, all riparian water right holders must reduce their water use in times of water shortages. Under the prior appropriation doctrine, a person may acquire a right to divert, store, and use water regardless of whether the land on which it is used is adjacent to a stream or within its watershed, provided that the water is used for reasonable and beneficial uses and is surplus to water from the same stream used by earlier appropriators. The rule of priority between appropriators is "first in time is first in right."

Water Rights Permits and Licenses

The Water Commission Act, which took effect in 1914 following a referendum, recognized the overriding interest of the people in the waters of the State, but provided that private rights to use water may be acquired in the manner provided by law. The act established a system of State-issued permits and licenses to appropriate water. Amended over the years, it now appears in Division 2 (commencing with Section 1000) of the Water Code. These provisions place responsibility for administering appropriative water rights with

SWRCB; however, the permit and license provisions do not apply to pre-1914 appropriative rights (those initiated before the act took effect in 1914). The act also provides procedures for adjudication of water rights, including court references to SWRCB and statutory adjudications of all rights to a stream system.

Groundwater Management

Generally, groundwater is available to any person who owns land overlying the groundwater basin. Groundwater management in California may be accomplished either by a judicial adjudication of the respective rights of overlying users and exporters, or by local management of rights to extract and use groundwater as authorized by statute or agreement. Statutory management may be granted to a public agency that also manages surface water, or to a groundwater management agency created expressly for that purpose by a special district act.

In 1991, the Water Code was amended by AB 255 to allow local water agencies overlying critically overdrafted groundwater basins to develop groundwater management plans. Only a few local agencies adopted plans pursuant to that authorization. In 1992, the Legislature adopted new sections authorizing another form of groundwater management, also available to any local agency that provides water service, if the groundwater was not subject to management under other provisions of law or a court decree. Plans adopted pursuant to the 1992 statute (commonly called AB 3030 plans) may include control of salt water intrusion; identification and protection of wellhead and recharge areas; regulation of the migration of contaminated water; provisions for abandonment and destruction of wells; mitigation of overdraft; replenishment; monitoring; facilitating conjunctive use; identification of well construction policies; and construction of cleanup, recharge, recycling, and extraction projects by the local agency.

Public Trust Doctrine

In the 1980s, the public trust doctrine was used by courts to limit traditional water rights. Under the equal footing doctrine of the U.S. Constitution, each state has title to tidelands and the beds of navigable lakes and streams within its borders. The public trust doctrine—recognized in some form by most states—embodies the principle that the state holds title to such properties within the state in trust for the beneficial use of the public, and that public rights of access to

and use of tidelands and navigable waters are inalienable. Traditional public trust rights include navigation, commerce, and fishing. California law has expanded the traditional public trust uses to include protection of fish and wildlife, preserving trust lands in their natural condition for scientific study and scenic enjoyment, and related open-space uses.

In 1983, the California Supreme Court extended the public trust doctrine's limitation on private rights to appropriative water rights. In *National Audubon Society v. Superior Court of Alpine County*, the court held that water right licenses held by the City of Los Angeles to divert water from streams tributary to Mono Lake remain subject to ongoing State supervision under the public trust doctrine. The court held that public trust uses must be considered and balanced when rights to divert water away from navigable water bodies are considered. The court also held that California's appropriative rights system and the public trust doctrine embody important precepts which "... make the law more responsive to the diverse needs and interests involved in planning and allocation of water resources." Consequently, in issuing or reconsidering any rights to appropriate and divert water, the State must balance public trust needs with the needs for other beneficial uses of water. In 1994, the SWRCB issued a final decision on Mono Lake (Decision 1631) in which it balanced the various uses in determining the appropriate terms and conditions of the water rights permit for the City of Los Angeles. The public trust doctrine will also be applied by the SWRCB in its current consideration of water rights in the Bay-Delta.

Since the 1983 National Audubon decision, the public trust doctrine has been involved in several other cases. In *United States v. State Water Resources Control Board* (commonly referred to as the Racanelli Decision and discussed below), the State Court of Appeal reiterated that the public trust doctrine is a significant limitation on water rights. The public trust doctrine was also a basis for the decision in *Environmental Defense Fund v. East Bay Municipal Utility District*. In this case, EDF claimed that EBMUD should not contract with USBR for water diverted from the American River upstream from the Sacramento urban area in a manner that would harm instream uses including recreational, scenic, and fish and wildlife preservation purposes. The Superior Court upheld the validity of EBMUD's contract with USBR, but placed limitations on the timing and amounts of deliveries to EBMUD. As a result of these cases, the SWRCB now routinely

implements the public trust doctrine through regulations and through terms and conditions in water rights permits and licenses.

Federal Power Act

The Federal Power Act created a federal licensing system administered by the Federal Energy Regulatory Commission and required that a license be obtained for nonfederal hydroelectric projects proposing to use navigable waters or federal lands. The act contains a clause modeled after a clause in the Reclamation Act of 1902, which disclaims any intent to affect state water rights law.

In a number of decisions dating back to the 1940s, the U.S. Supreme Court held that provisions of the Reclamation Act and the Federal Power Act preempted inconsistent provisions of law. Decisions under both acts found that these clauses were merely “saving clauses” which required the United States to follow minimal state procedural laws or to pay just compensation where vested nonfederal water rights are taken.

In *California v. United States* (1978), however, the U.S. Supreme Court disavowed dicta in a number of earlier Supreme Court decisions which stated that under the Reclamation Act the United States need not comply with state water law. It held that the Reclamation Act clause requires the USBR to comply with conditions in state water rights permits unless those conditions conflict with “clear Congressional directives.” In *California v. FERC* (1990), commonly referred to as the Rock Creek Decision, the U.S. Supreme Court rejected California’s argument that the Federal Power Act clause required deference to state water law, as the Reclamation Act did. The Supreme Court distinguished between the two acts, finding that the Federal Power Act envisioned a broader and more active oversight role than did the Reclamation law. The Federal District Court case of *Sayles Hydro Association v. Maughan* (1993), reinforced this view by holding that federal law prevents any state regulation of federally licensed power projects other than determining proprietary water rights.

In 1994, the U.S. Supreme Court issued a decision referred to as the Elkhorn decision or Tacoma decision (*PUD No. 1 of Jefferson County and City of Tacoma v. Washington Department of Ecology*). The Supreme Court held that a state minimum instream flow requirement is a permissible condition of a Clean Water Act Section 401 certification, in response to a proposal to construct a hydroelectric project on the Dosewallips

River. Pursuant to Section 401 of the Clean Water Act, the project proponents were required to obtain state certification for the hydroelectric project. The State of Washington set an instream flow requirement in its certification process to protect the river’s designated use as fish habitat. Section 303 of the Clean Water Act requires states to establish water quality standards for intrastate waters, with the standards to include both numeric water quality criteria and designated uses.

Area of Origin Protections

During the years when California’s two largest water projects, the CVP and SWP, were being planned and developed, area of origin provisions were added to the water code to protect local Northern California supplies from being depleted as a result of the projects. County of origin statutes reserve water supplies for counties in which the water originates when, in the judgment of the SWRCB, an application for the assignment or release from priority of State water right filings will deprive the county of water necessary for its present and future development. Watershed protection statutes are provisions which require that the construction and operation of elements of the CVP and the SWP not deprive the watershed, or area where water originates (or immediately adjacent areas which can be conveniently supplied with water) of the prior right to water reasonably required to supply the present or future beneficial needs of the watershed area or any of its inhabitants or property owners.

The Delta Protection Act, enacted in 1959 (not to be confused with the Delta Protection Act of 1992, which relates to land use), declares that the maintenance of an adequate water supply in the Delta—to maintain and expand agriculture, industry, urban, and recreational development in the Delta area and provide a common source of fresh water for export to areas of water deficiency—is necessary for the peace, health, safety, and welfare of the people of the State, and is subject to the County of Origin and Watershed Protection laws. The act requires the SWP and the CVP to provide salinity control in the Delta and an adequate water supply for water users in the Delta.

In 1984, additional area of origin protections were enacted covering the Sacramento, Mokelumne, Calaveras, and San Joaquin Rivers; the combined Truckee, Carson, and Walker Rivers; and Mono Lake. The protections prohibit the export of groundwater from the combined Sacramento River and Delta Basins, unless the export is in compliance with local groundwater plans.

Environmental Regulatory Statutes and Programs

Endangered Species Act

Under the federal ESA, an endangered species is one that is in danger of extinction in all or a significant part of its range, and a threatened species is one that is likely to become endangered in the near future. The ESA is designed to preserve endangered and threatened species by protecting individuals of the species and their habitat and by implementing measures that promote their recovery. The ESA sets forth a procedure for listing species as threatened or endangered. Final listing decisions are made by USFWS or NMFS.

Once a species is listed, Section 7 of the act requires that federal agencies, in consultation with the USFWS or NMFS, ensure that their actions do not jeopardize the continued existence of the species or habitat critical for the survival of that species. The federal wildlife agencies are required to provide an opinion as to whether the federal action would jeopardize the species. The opinion must include reasonable and prudent alternatives to the action that would avoid jeopardizing the species' existence. Federal actions subject to Section 7 include issuance of federal permits such as the dredge and fill permit required under Section 404 of the federal Clean Water Act, which requires that the project proponent demonstrate that there is no feasible alternative consistent with the project goals that would not affect listed species. Mitigation of the proposed project is not considered until this hurdle is passed.

State agencies and private parties also are subject to the ESA. Section 9 of the ESA prohibits the "take" of endangered species and threatened species for which protective regulations have been adopted. Take has been broadly defined to include actions that harm or harass listed species or that cause a significant loss of their habitat. State agencies and private parties are generally required to obtain a permit from the USFWS or NMFS under Section 10(a) of the ESA before carrying out activities that may incidentally result in taking listed species. The permit normally contains conditions to avoid taking listed species and to compensate for habitat adversely impacted by the activities.

California Endangered Species Act

The California Endangered Species Act is similar to the federal ESA. Listing decisions are made by the California Fish and Game Commission.

All State lead agencies are required to consult with the Department of Fish and Game about projects that impact State listed species. DFG is required to render an opinion as to whether the proposed project jeopardizes a listed species and to offer alternatives to avoid jeopardy. State agencies must adopt reasonable alternatives unless there are overriding social or economic conditions that make such alternatives infeasible. For projects causing incidental take, DFG is required to specify reasonable and prudent measures to minimize take. Any take that results from activities that are carried out in compliance with these measures is not prohibited.

Many California species are both federally listed and State listed. CESA directs DFG to coordinate with the USFWS and NMFS in the consultation process so that consistent and compatible opinions or findings can be adopted by both federal and State agencies.

Natural Community Conservation Planning

Adopted in 1991, California's Natural Community Conservation Planning Act establishes a program to identify the habitat needs of species before they become listed as threatened or endangered, and to develop appropriate voluntary conservation methods compatible with development and growth. Participants in the program develop plans to protect certain habitat and will ultimately enter into agreements with DFG to ensure that the plans will be carried out. Plans must be created so that they are consistent with endangered species laws.

Dredge and Fill Permits

Section 404 of the federal Clean Water Act regulates the discharge of dredged and fill materials into waters of the United States, including wetlands. The term "discharge of dredged and fill material" has been defined broadly to include the construction of any structure involving rock, soil, or other construction material. No discharge may occur unless a permit is obtained from the USACE. Generally, the project proponent must agree to mitigate or have plans to mitigate environmental impacts caused by the project before a permit is issued. The EPA has the authority to veto permits issued by the Corps for projects that have unacceptable adverse effects on municipal water supplies, fisheries, wildlife, or recreational areas.

Section 404 allows the issuance of a general permit on a state, regional, or nationwide basis for certain categories of activities that will cause only minimal en-

vironmental effects. Such activities are permitted without the need of an individual permit application. Installation of a stream gaging station along a river levee is one example of an activity which falls within a nationwide permit.

The USACE also administers a permitting program under Section 10 of the 1899 Rivers and Harbors Act. Section 10 generally requires a permit for obstructions to navigable water. The scope of the permit under Section 10 is narrower than under Section 404 since the term “navigable waters” is more limited than “waters of the United States.”

The majority of water development projects must comply with Section 404, Section 10, or both.

Public Interest Terms and Conditions

The Water Code authorizes the SWRCB to impose public interest terms and conditions to conserve the public interest, specifically the consideration of instream beneficial uses, when it issues permits to appropriate water. It also considers environmental impacts of approving water transfers under its jurisdiction. Frequently, it reserves jurisdiction to consider new instream uses and to modify permits accordingly.

Releases of Water for Fish

Fish and Game Code Section 5937 provides protection to fisheries by requiring that the owner of any dam allow sufficient water at all times to pass through the dam to keep in good condition any fisheries that may be planted or exist below the dam. In *California Trout, Inc. v. the State Water Resources Control Board* (1989), the court determined that Fish and Game Code sections 5937 and 5946 required the SWRCB to modify the permits and licenses issued to the City of Los Angeles to appropriate water from the streams feeding Mono Lake to ensure sufficient water flows for downstream fisheries. The SWRCB reconsidered Los Angeles’ permits and licenses in light of Fish and Game Code Section 5937 and the public trust doctrine. In 1994, the SWRCB adopted D-1631, which requires Los Angeles to allow sufficient flows from the streams feeding Mono Lake to reach the lake to allow it to rise to the level of 6,391 feet in approximately twenty years.

Streambed Alteration Agreements

Fish and Game Code Sections 1601 and 1603 require that any governmental entity or private party altering a river, stream, lakebed, bottom, or channel enter into an agreement with DFG. When the project

may substantially impact an existing fish or wildlife resource, DFG may require that the agreement include provisions designed to protect riparian habitat, fisheries, and wildlife. New water development projects and ongoing maintenance activities are often subject to these sections.

Migratory Bird Treaty Act

This act implements various treaties for the protection of migratory birds and prohibits the “taking” (broadly defined) of birds protected by those treaties without a permit. The Secretary of the Interior determines conditions under which a taking may occur, and criminal penalties are provided for unlawfully taking or transporting protected birds. Liability imposed by this act was one of several factors leading to the decision to close the San Luis Drain and Kesterson Reservoir.

Environmental Review and Mitigation

Another set of environmental statutes compels governmental agencies and private individuals to document and consider the environmental consequences of their actions. They define the procedures through which governmental agencies consider environmental factors in their decision-making process.

National Environmental Policy Act

NEPA directs federal agencies to prepare an environmental impact statement for all major federal actions which may have a significant effect on the human environment. It states that it is the goal of the federal government to use all practicable means, consistent with other considerations of national policy, to protect and enhance the quality of the environment. It is a procedural law requiring all federal agencies to consider the environmental impacts of their proposed actions during the planning and decision-making processes.

California Environmental Quality Act

CEQA, modeled after NEPA, requires California public agency decision-makers to document and consider the environmental impacts of their actions. It requires an agency to identify ways to avoid or reduce environmental damage, and to implement those measures where feasible. CEQA applies to all levels of California government, including the State, counties, cities, and local districts.

CEQA requires that a public agency carrying out a project with significant environmental effects prepare an environmental impact report. An EIR contains a description of the project; a discussion of the project's environmental impacts, mitigation measures, and alternatives; public comments; and the agency's responses to the comments. In other instances, a notice of exemption from the application of CEQA may also be appropriate.

NEPA does not generally require federal agencies to adopt mitigation measures or alternatives provided in the EIS. CEQA imposes substantive duties on all California governmental agencies that approve projects with significant environmental impacts to adopt feasible alternatives or mitigation measures that substantially lessen these impacts, unless there are overriding reasons. When a project is subject to both CEQA and NEPA, both laws encourage the agencies to cooperate in planning the project and to prepare joint environmental documents.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act expresses congressional policy to protect the quality of the aquatic environment as it affects the conservation, improvement, and enjoyment of fish and wildlife resources. Under this act, any federal agency that proposes to control or modify any body of water, or to issue a permit allowing control or modification of a body of water, must first consult with the USFWS and State wildlife officials. This requires coordination early in the project planning and environmental review processes.

Protection of Wild and Natural Areas

Water use and management are also limited by several statutes designed to set aside resources or areas to preserve their natural conditions. These statutes preclude many activities, including most water development projects, within the areas set aside.

Federal Wild and Scenic Rivers System

In 1968, Congress passed the National Wild and Scenic Rivers Act to preserve, in their free-flowing condition, rivers which possess "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values." The act also states "... that the established national policy of dam and other construction at appropriate sections of rivers of the United States needs to be complemented by a policy

that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."

The act prohibits federal agencies from constructing, authorizing, or funding the construction of water resources projects having a direct and adverse effect on the values for which a river was designated. This restriction also applies to rivers designated for potential addition to the National Wild and Scenic Rivers System. Included in the system are most rivers protected under California's State Wild and Scenic Rivers Act; these rivers were included in the national system upon California's petition on January 19, 1981. The West Walker and East Fork Carson Rivers are not included in the federal system.

California Wild and Scenic Rivers System

In 1972, the Legislature passed the California Wild and Scenic Rivers Act, declaring that specified rivers possess extraordinary scenic, recreational, fishery, or wildlife values, and should be preserved in a free-flowing state for the benefit of the people of California. It declared that such use of the rivers would be the highest and most beneficial use within the meaning of Article X, Section 2 of the California Constitution. The act prohibits construction of any dam, reservoir, diversion, or other water impoundment on a designated river. Diversions needed to supply domestic water to residents of counties through which the river flows may be authorized, if the Secretary for Resources determines that the diversion will not adversely affect the river's free-flowing character.

The major difference between the national and State acts is that if a river is designated wild and scenic under the State act, FERC can still issue a license to build a dam on that river, thus overriding the State system. (See Federal Power Act discussion above.) This difference explains why national wild and scenic designation is often sought.

National Wilderness Act

The Wilderness Act sets up a system to protect federal land designated by Congress as a "wilderness area" and preserve it in its natural condition. Wilderness is defined as undeveloped federal land retaining its primeval character and influence without permanent improvements or human habitation. Commercial enterprise, permanent roads, motor vehicles, aircraft landings, motorized equipment, or construction of

structures or installations (such as dams, diversions, conveyance facilities, and gaging stations) are prohibited within designated wilderness areas.

Water Quality Protection

Water quality is an important aspect of water resource management. The SWRCB plays a central role in determining both water rights and regulating water quality. The Department of Health Services has regulatory oversight over drinking water quality, a program administered in coordination with county environmental health agencies. Discussed below are key State and federal laws governing water quality.

Porter-Cologne Water Quality Control Act

This act is California's comprehensive water quality control law and is a complete regulatory program designed to protect water quality and beneficial uses of the State's water. The act requires the adoption of water quality control plans by the State's nine RWQCBs for areas within their regions. These plans are subject to the approval of the SWRCB, and ultimately the federal EPA. The plans are to be reviewed and updated.

The primary method of implementing the plans is to require each discharger of waste that could impact the waters of the State to meet formal waste discharge requirements. Anyone discharging waste or proposing to discharge waste into the State's waters must file a "report of waste discharge" with the regional water quality control board within whose jurisdiction the discharge lies. Dischargers are subject to a wide variety of administrative, civil, and criminal actions for failing to file a report. After the report is filed, the regional board may issue waste discharge requirements that set conditions on the discharge. The waste discharge requirements must be consistent with the water quality control plan for the body of water and protect the beneficial uses of the receiving waters. The regional boards also implement Section 402 of the federal Clean Water Act, which allows the State to issue a single discharge permit for the purposes of both State and federal law.

Clean Water Act—National Pollutant Discharge Elimination System

Section 402 of the Clean Water Act established a permit system known as the National Pollutant Discharge Elimination System to regulate point sources

of discharges in navigable waters of the United States. The EPA was given the authority to implement the NPDES, although the act also authorizes states to implement the act in lieu of the EPA, provided the state has sufficient authority.

In 1972, the Legislature amended the Porter-Cologne Act to give California the authority and ability to operate the NPDES permits program. Before a permit may be issued, Section 401 of the Clean Water Act requires that the regional water quality control board certify that the discharge will comply with applicable water quality standards. After making the certification, the regional board may issue the permit, satisfying both State and federal law. In 1987, Section 402 was amended to require the regulation of storm water runoff under the NPDES.

Safe Drinking Water Act

The SDWA, enacted in 1974 and significantly amended in 1986 and 1996, directed the EPA to set national standards for drinking water quality. It required the EPA to set maximum contaminant levels for a wide variety of constituents. Local water suppliers are required to monitor their water supplies to assure that regulatory standards are not exceeded.

The 1986 amendments set a timetable for the EPA to establish standards for specific contaminants and increased the range of contaminants local water suppliers were required to monitor to include contaminants that did not yet have an MCL established. The amendments included a wellhead protection program, a grant program for designating sole-source aquifers for special protection, and grant programs and technical and financial assistance to small systems and states.

The 1996 amendments added a provision requiring states to create their own revolving funds in order to be eligible to receive federal matching funds for loans and grants to public water systems. More details of the 1996 amendments are described in Chapter 2.

California Safe Drinking Water Act

In 1976, California enacted its own Safe Drinking Water Act, requiring the Department of Health Services to regulate drinking water, including: setting and enforcing federal and State drinking water standards; administering water quality testing programs; and administering permits for public water system operations. The federal Safe Drinking Water Act al-

lows the State to enforce its own standards in lieu of the federal standards so long as they are at least as protective as the federal standards. Significant amendments to the California act in 1989 incorporated the new federal safe drinking water act requirements into California law, gave DHS discretion to set more stringent MCLs, and recommended public health levels for contaminants. DHS was authorized to consider the technical and economic feasibility of reducing contaminants in setting MCLs. The standards established by DHS are found in the California Code of Regulations, Title 22.

Historical Background—Bay-Delta Regulatory Actions

The SWRCB issued the first water rights permits to the USBR for operation of the CVP in 1958, and to the Department for operation of the SWP in 1967. In these and all succeeding permits issued for the CVP and SWP, the SWRCB reserved jurisdiction to reformulate or revise terms and conditions relative to salinity control, effect on vested rights, and fish and wildlife protection in the Delta. SWRCB has a dual role of issuing both water rights permits and regulating water quality.

Decision 1485

In 1976, SWRCB initiated proceedings leading to the adoption of D-1485 in 1978. D-1485 set forth conditions—including water quality standards, export limitations, and minimum flow rates—for SWP and CVP operations in the Delta and superseded all previous water rights decisions for the SWP and CVP operations in the Delta. Among beneficial uses to be protected by the decision were: municipal and industrial water supply, agriculture, and fish and wildlife.

In formulating D-1485, the SWRCB asserted that Delta water quality should be at least as good as it would have been if the SWP and CVP had not been constructed. In other words, both the SWP and the CVP were to be operated to meet “without project” conditions. D-1485 standards included different levels of protection to reflect variations in hydrologic conditions during different types of water years.

To help implement these water quality standards, D-1485 mandated an extensive monitoring program. It also called for special studies to provide critical data about major concerns in the Delta and Suisun Marsh for which information was insufficient. D-1485 included water quality standards for Suisun Marsh, as

well as for the Delta, requiring the Department and USBR to develop a plan for the marsh that would ensure meeting long-term standards.

Recognizing that the complexities of project operations and water quality conditions would change over time, the SWRCB also specified that the Delta water right hearings would be reopened within ten years of the date of adoption of D-1485, depending upon changing conditions in the Bay-Delta region and the availability of new evidence on beneficial uses of water.

Racanelli Decision

Lawsuits by various interests challenged D-1485 and the decision was overturned by the trial court in 1984. Unlike its predecessor, D-1379, whose standards had been judicially stayed, D-1485 remained in effect. In 1986, the appellate court in the Racanelli Decision (named after Judge Racanelli who wrote the opinion) broadly interpreted the SWRCB’s authority and obligation to establish water quality objectives, and its authority to set water rights permit terms and conditions that provide reasonable protection of beneficial uses of Delta water.

The court stated that SWRCB needed to separate its water quality planning and water rights functions. SWRCB needs to maintain a “global perspective” in identifying beneficial uses to be protected (not limited to water rights) and in allocating responsibility for implementing water quality objectives (not just to the SWP and CVP, nor only through the SWRCB’s own water rights processes). The court recognized the SWRCB’s authority to look to all water rights holders to implement water quality standards and advised SWRCB to consider the effects of all Delta and upstream water users in setting and implementing water quality standards in the Delta, as well as those of the SWP and the CVP.

SWRCB Bay-Delta Proceedings

Hearings to adopt a water quality control plan and water rights decision for the Bay-Delta estuary began in July 1987. Their purpose was to develop a Bay-Delta water quality control plan and to consider public interest issues related to Delta water rights, including implementation of water quality objectives. During the first phase of the proceedings, testimony was heard on issues pertaining to the reasonable and beneficial uses of the estuary’s water. The second phase of the Bay-Delta hearings was to come up with a water quality

control plan. SWRCB adopted a final plan in May 1991. The federal EPA rejected this plan in September 1991, setting the stage for preparation of federal water quality standards for the Bay-Delta.

With the adoption of the water quality control plan, the SWRCB began the EIR scoping phase and held several workshops during 1991 to receive testimony regarding planning activities, facilities development, negotiated settlements, and flow objectives.

Concurrently, under the broad authority of the ESA, the federal regulatory process was proceeding toward development of Delta standards and upstream measures applicable to the CVP and SWP for the protection of the threatened winter-run chinook salmon. In February 1993, the NMFS issued a long-term biological opinion governing operations of the CVP and SWP with Delta environmental regulations that, in certain months, were more restrictive than SWRCB's proposed measures. In March 1993, the USFWS listed the Delta smelt as a threatened species and shortly thereafter indicated that further restrictions of CVP and SWP operations would be required. In December 1993, EPA announced its proposed standards for the estuary in place of the SWRCB water quality standards that EPA had rejected in 1991. In addition, USFWS proposed to list the Sacramento splittail as a threatened species, and NMFS announced its decision to change the status of winter-run salmon from threatened to endangered.

The impending regulatory gridlock lead to the negotiation and signing of the June 1994 Framework Agreement for the Bay-Delta estuary. The Framework Agreement and subsequent Bay-Delta activities are described in Chapter 2.

To mitigate fish losses at Delta export facilities, the Department and USBR have entered into agreements with DFG. As part of the environmental review process for installing four additional pumps at SWP's Banks Pumping Plant in the Delta in 1992, DFG and the Department negotiated an agreement to preserve fish potentially affected by the operation of the pumps. This agreement, signed by the two departments in 1986, identifies the steps needed to offset adverse impacts of the Banks Pumping Plant on fisheries. It sets up a procedure to calculate direct fishery losses annually and requires the Department to pay for mitigation projects that would offset the losses. Losses of striped bass, chinook salmon, and steelhead are to be mitigated first. Mitigation of other species is to follow as

impacts are identified and appropriate mitigation measures found. In recognition of the fact that direct losses today would probably be greater if fish populations had not been depleted by past operations, the Department also provided \$15 million for a program to increase the probability of quickly demonstrated results. In 1996, the Department and DFG agreed to extend the period for expending the remainder of the \$15 million to the year 2001.

Following negotiation of the agreement for Banks Pumping Plant, DFG negotiated a similar agreement with USBR for its CVP Tracy Pumping Plant.

Surface Water Management

The following sections are brief descriptions of major statutes affecting surface water management in California.

CVPIA

The Central Valley Project Improvement Act (Title 34 of PL 102-575) made significant changes to the CVP's legislative authorization, amending the project's purposes to place fish and wildlife mitigation and restoration on a par with water supply, and to place fish and wildlife enhancement on a par with power generation. Major provisions of the act are summarized below.

The act prohibits execution of new CVP water supply contracts for purposes other than fish and wildlife (with a few limited exceptions) until all environmental restoration actions specified in the act have been completed. Existing long-term water supply contracts are to be renewed for a 25-year term, with the possibility of subsequent 25-year renewals thereafter. Only interim contract renewals are allowed until the programmatic EIS required by the act is completed. Renewed contracts are to incorporate CVPIA's new requirements, such as restoration fund payments.

The act allows transfers of project water to users outside of the CVP service area, under numerous specified conditions. The conditions include a right of first refusal to a proposed transfer by existing CVP water users (under the same terms and conditions specified in the proposed transfer), and a requirement that proposed transfers of more than 20 percent of a contracting agency's project water supply be subject to review and approval by the contracting agency.

The act requires DOI to develop water conservation criteria, and to review conservation plans

submitted by contracting agencies pursuant to Reclamation Reform Act requirements for conformance to the CVPIA criteria. Tiered pricing is to be included in CVP water supply contracts when they are renewed. Project water supply and repayment contractors' surface water delivery systems are to be equipped with water measurement devices.

The act directs DOI to develop a program, by October 1995, to make all reasonable efforts to double, by 2002, natural production (based on 1967-91 fishery population levels) of specified anadromous fish in the Central Valley, and to implement that program. (A portion of the San Joaquin River is exempted from this provision.) The act dedicates 800 taf/yr of CVP yield to fish and wildlife purposes, and authorizes DOI to acquire supplemental water for meeting the fish doubling goal. The act further requires that DOI provide an annual Trinity River instream flow of at least 340 taf through 1996, via releases from Lewiston Dam, with subsequent instream flow requirements to be determined by a USFWS instream flow study.

The act requires DOI to provide, from CVP supplies, firm water supplies (i.e., deliver water corresponding to existing non-firm supplies such as agricultural drainage) to specified federal, State, and private wildlife refuges in the Sacramento and San Joaquin Valleys. DOI is to acquire, from willing sellers, an additional increment of water supply for the wildlife areas, corresponding to their full habitat development needs. All of the supplemental water needs are to be met by 2002.

The act requires DOI to implement numerous specified environmental restoration actions, such as constructing a temperature control device at Shasta Dam, remedying fish passage problems at Red Bluff Diversion Dam, replenishing spawning gravel, and assisting in screening non-federal diversions. Costs of some of these restoration actions are allocated in part to the State of California. DOI is required to enter into a cost-sharing agreement with California for the environmental restoration actions whose costs are allocated in part to California.

The act requires DOI to prepare specified reports and studies, to implement a Central Valley fish and wildlife monitoring program, and to develop ecosystem and water operations models. Examples of reports to be prepared include a least-cost plan to replace the 800 taf/yr of project yield dedicated to environmental purposes, and an evaluation of water supply and development requirements for 120,000 acres of wetlands

identified in a Central Valley Habitat Joint Venture report. DOI is also directed to prepare, by October 1995, a programmatic EIS analyzing impacts of CVPIA implementation.

The act authorizes DOI to carry out a land retirement program, and specifies categories of land that may be acquired. San Joaquin Valley drainage-impaired lands are among the authorized categories.

The act establishes a CVPIA restoration fund within the federal treasury, and directs DOI to collect mitigation and restoration payments from project water and power users. DOI is authorized to use appropriations from the fund to carry out the environmental restoration measures required by the act. Payments are capped at \$6/af for agricultural water contractors and \$12/af (1992 dollars) for municipal and industrial water contractors, but the caps are subject to adjustment for inflation. (An additional restoration payment is assessed against contractors in the Friant Division, in lieu of requiring Friant Dam releases for instream flows in the San Joaquin River between Gravelly Ford and the Mendota Pool.)

Regional and Local Water Agency Formation

In general, there are two methods in California for forming special districts which develop, control, or distribute water: enactment of a general act under which the districts may be formed as set forth in the act, and enactment of a special act creating the district and prescribing its powers. There are more than 40 different statutes under which local agencies may be so organized. In addition, there are a number of special act districts, such as the Metropolitan Water District of Southern California. The Department's Bulletin 155-94, *General Comparison of Water District Acts* (March 1994), presents a comparison of various water district acts in California.

In addition to public agencies, there are other entities that may provide water supply. Mutual water companies, for example, are private corporations that perform water supply and distribution functions similar to public water districts. Investor-owned utilities may also be involved in water supply activities, sometimes as an adjunct of hydroelectric power development.

Water Use Efficiency

Article X, Section 2 of the California Constitution prohibits the waste, unreasonable use, unreasonable method of use, or unreasonable method

of diversion of water. It also declares that the conservation and use of water “shall be exercised with a view to the reasonable and beneficial use thereof in the public interest and for the public welfare.” Although provisions and requirements of the Constitution are self-executing, the Constitution states that the Legislature may enact statutes to advance its policy. Water Code Section 275 directs the Department and SWRCB to “take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste or unreasonable use of water.” SWRCB’s Water Right Decision 1600, directing the Imperial Irrigation District to adopt a water conservation plan, is an example of an action brought under Article X, Section 2. SWRCB’s authority to order preparation of such a plan was upheld in 1990 by the courts in *Imperial Irrigation District v. State Water Resources Control Board*.

Urban Water Management Planning Act

Since 1983, this act has required urban water suppliers that serve more than 3,000 customers or more than 3,000 af/yr to prepare and adopt urban water conservation plans. The act authorizes the supplier to implement the water conservation program. The plans must contain several specified elements, including estimates of water use, identification of existing conservation measures, identification of alternative conservation measures, a schedule of implementation of actions proposed by the plan, and identification of the frequency and magnitude of water shortages. In 1991, the act was amended in response to the drought to require water suppliers to estimate water supplies available at the end of one, two, and three years, and to develop contingency plans for severe shortages. The act also requires water suppliers to review and update their plans at least once every five years.

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act required the Department, with the assistance of an advisory task force, to adopt a model water-efficient landscape ordinance. The model ordinance was adopted in August 1992, and has been codified in Title 23 of the California Code of Regulations. It establishes methods of conserving water through water budgeting plans, plant use, efficient irrigation, and auditing.

Cities and counties were required to review the model ordinance and adopt a water-efficient landscape ordinance by January 1, 1993, if they had not done so already. Alternatively, cities and counties could make

a finding that such an ordinance is unnecessary due to climatic, geological, or topographic conditions, or water availability. If a city or county failed to adopt a water efficient landscape ordinance or make findings by January 31, 1993, the model ordinance became effective in that jurisdiction.

Agricultural Water Management Planning Act

Under this act, agricultural water suppliers supplying more than 50 taf of water annually were required to submit a report to the Department indicating whether a significant opportunity exists to conserve water or reduce the quantity of highly saline or toxic drainage water through improved irrigation water management. The act provided that agricultural water suppliers who indicated that they had an opportunity to conserve water or reduce the quantity of highly saline or toxic water should prepare a water management plan and submit it to the Department. The Department was required to review the plans and submit a report to the Legislature by January 1993.

Agricultural Water Suppliers Efficient Management Practices Act

The Agricultural Water Suppliers Efficient Management Practices Act, adopted in 1990, required that the Department establish an advisory committee to review efficient agricultural water management practices. Under the act, the Department was required to offer assistance to agricultural water suppliers seeking to improve the efficiency of their water management practices. The committee developed a Memorandum of Understanding to implement the practices, and to establish an Agricultural Water Management Council. The advisory committee adopted the MOU in October 1996. The MOU was declared in effect in May 1997 after 15 agricultural water suppliers, representing 2 million irrigated acres, had signed. The Council was established and held its first meeting in July 1997.

Agricultural Water Conservation and Management Act of 1992

This act gives any public agency that supplies water for agricultural use authority to institute water conservation or efficient management programs. The programs can include irrigation management services, providing information about crop water use, providing irrigation consulting services, improving the supplier’s delivery system, providing technical and fi-

nancial assistance to farmers, encouraging conservation through pricing of water, and monitoring.

Water Recycling Act of 1991

This act describes the environmental benefits and public safety of using recycled water as a reliable and cost-effective method of helping to meet California's water supply needs. It sets a statewide goal to recycle 700 taf/yr by the year 2000 and 1 maf/yr by 2010.

